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SHELTON, CT 06484-6212			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
**		10/774,821	HERRANEN ET AL.		
	Office Action Summary	Examiner	Art Unit		
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	The MAILING DATE of this communication app	Nelson D. Hernandez	2622		
Period fo					
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE IN THE MAIL	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).		
Status		•			
1)⊠	Responsive to communication(s) filed on 02 Ju	<u>ıly 2007</u> .			
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.		
Dispositi	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) <u>1-38</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed.  Claim(s) <u>1-38</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/o	wn from consideration.	·		
Applicati	ion Papers				
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>02 July 2007</u> is/are: a)[ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	☑ accepted or b) ☐ objected to l drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).		
Priority ι	under 35 U.S.C. § 119				
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document:  2. Certified copies of the priority document:  3. Copies of the certified copies of the priority application from the International Bureausee the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage		
Attachmen	nt(s) ce of References Cited (PTO-892)	4) ☐ Interview Summary	ı (PTO-413)		
2) Notice 3) Information	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate		

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## **DETAILED ACTION**

### **Drawings**

1. The drawings were received on July 2, 2007. These drawings are acceptable.

# Response to Amendment

The Examiner acknowledges the amended claims filed on July 2, 2007. Claims1, 12, 17, 19, 24, 28, 33 and 35-37 have been amended.

# Response to Arguments

3. Applicant's arguments with respect to **independent claims 1, 12, 19, 24, 33 and**37 have been considered but are moot in view of the new ground(s) of rejection.

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### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-4, 7, 8, 11, 24, 25, 28-30 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyake, US Patent 7,110,033 B2.

Regarding claim 1, Miyake discloses an electronic device (portable cellular phone; col. 27, lines 28-38) comprising: a device printed wiring board (Fig. 67: 30); an electrical connector (Figs. 64: 29 and 67: 29) connected to the device printed wiring board (See fig. 67); a camera (Fig. 64: 2) coupled to the device printed wiring board by the electrical connector at a stepless movement height connection (note that the connectors 28a of the camera 2 allows the camera to be slid into the connector at a stepless movement; see fig. 64), wherein the stepless movement height connection allows the camera to slide relative to the electrical connector along a first axis to allow positioning of the camera relative to the electrical connector at one of a plurality of different heights along the first axis, wherein the plurality of different heights extends along a majority of a height of the camera (Note that the structure of the camera in Miyake allows the camera to be slid into the connector at one of a plurality of different heights since the connectors 28a extend along the majority of the casing of said

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camera, providing connection at any position where the camera is positioned inside the connector) (Col. 25, ¶ 62 – col. 27, line 38).

Regarding claim 2, limitations can be found in claim 1.

Regarding claim 3, limitations can be found in claim 1.

Regarding claim 4, Miyake discloses that the electrical connector comprises a camera receiving slot with electrical contacts (see electric pattern inside connector 29 as shown in figs. 64 and 67) extending into the camera receiving slot, and wherein the camera is located in the camera receiving slot (Col. 25, ¶ 62 – col. 27, line 38).

Regarding claim 7, limitations can be found in claim 1.

Regarding claim 8, limitations can be found in claim 1.

Regarding claim 11, limitations can be found in claim 1.

Regarding claim 24, Miyake discloses a portable electronic device (portable cellular phone; col. 27, lines 28-38) comprising: a device printed wiring board (Fig. 67: 30); an electrical connector (Figs. 64: 29 and 67: 29) connected to the device printed wiring board, wherein the electrical connector has a camera receiving slot (Fig. 65: 29b); and a camera coupled to the printed wiring board by the electrical connector (See figs. 64 and 67, the camera is inserted into the connector slot), wherein a housing of the camera is located partially inside the camera receiving area to provide a substantially stationery telescoping connection with a partially coplanar height (Note that the structure of the camera in Miyake allows the camera to be slid into the connector at one of a plurality of different heights since the connectors 28a extend along the majority of the casing of said camera, providing connection at any position where the camera is

positioned inside the connector), wherein the camera comprises electrical conductors (Fig. 64: 28a) on the housing (Fig. 64: 2), and wherein the electrical conductors extend along a majority of the height of the camera (see conductors 28a extending along a majority of the height of the camera as shown in fig. 64) (Col. 25, ¶ 62 – col. 27, line 38).

Regarding claim 25, Miyake discloses that the electrical connector comprises a housing with a general ring shape and wherein the camera receiving slot is located inside the general ring shape (See fig. 65C).

Regarding claim 28, Miyake discloses that the camera comprises electrical conductors (Fig. 64: 28a) on at least one lateral side of the housing of the camera which are located inside the camera receiving slot (Fig. 64: 29).

Regarding claim 29, Miyake discloses that the electrical conductors comprise metallized conductors formed on exterior sides of the housing of the camera (Fig. 64: 28a).

Regarding claim 30, limitations can be found in claim 24.

Regarding claim 32, limitations can be found in claim 24.

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# Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 5, 6, 19-23, 31 and 33-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake, US Patent 7,110,033 B2 in view of Miyake, US Patent 6,836,669 B2.

**Regarding claim 5**, Miyake 033 does not explicitly disclose that the device printed wiring board comprises a slot, and wherein the camera extends through the slot.

However, Miyake discloses a portable telephone (Fig. 1) provided with a camera (Fig. 1: 1), said portable telephone comprising a telephone printed wiring board (mother board 2 as shown in fig. 1) having a transceiver attached to said printed wiring board (Miyake inherently disclose a transceiver attached to the mobile telephone printed wiring board since a transceiver is necessitated in a mobile telephone printed wiring board to transmit and receive data), wherein said telephone printed wiring board comprises camera electrical connector (formed as a hole in the substrate) having a camera receiving area (opening 201 as shown in fig. 2A) adapted to receive a camera therein and make electrical contact with conductors (Fig. 2A: 104), said receiving portion comprises a through hole extending entirely through a said camera electrical connector (See figs. 1 and 2A) (Col. 4, line 63 – col. 5, line 46).

Therefore, taking the combined teaching of Miyake 033 in view of Miyake 669 as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electrical connector in Miyake 033 by having a slot in the printed wiring board and having the camera extending through the slot. The motivation to do so would have been to reduce the size and thickness of the mobile telephone as suggested by Miyake 669 (Col. 2, lines 36-43).

Regarding claim 6, the combined teaching of Miyake 033 in view of Miyake 669 as discussed and analyzed in claim 5 teaches that the camera comprises contacts and the electrical connector comprises substantially stationary conductors, and wherein the contacts are adapted to slide along the substantially stationary conductors when the camera is inserted into the electrical connector and into the slot of the device printed wiring board (Miyake 033, col. 25, ¶ 62 – col. 27, line 38) but fails to teach that the contacts are spring contacts.

However, Official Notice is taken that the use of spring contacts (such as J-lead contacts) in semiconductors devices to connect said semiconductor device to a wiring board is notoriously well known in the art and one of ordinary skill in the art would find obvious to have the contact of the camera in Miyake 033 and Miyake 966 made as a spring with the motivation of maintaining the image pickup device in place while protecting the device from cracking when assembling said device to a substrate or a wiring board.

Regarding claim 19, Miyake 033 discloses a printed wiring board (Fig. 67: 30) and electrical connector subassembly (Fig. 64: 29 and 67: 29) comprising: a mobile

telephone printed wiring board (Fig. 67: 30; Miyake 033 discloses that the camera is mounted to a cellular phone) having a transceiver attached to the mobile telephone printed wiring board (Miyake 033 inherently disclose a transceiver attached to the mobile telephone printed wiring board since a transceiver is necessitated in a mobile telephone printed wiring board to transmit and receive data); and a camera electrical connector (Fig. 64: 29 and 67: 29) attached to the mobile telephone printed wiring board (See fig. 67), wherein the camera electrical connector comprises a camera receiving area adapted to receive a camera therein and make electrical contact at one of a plurality of different locations along a majority of a height of the camera inside the camera receiving area (Note that the structure of the camera in Miyake 033 allows the camera to be slid into the connector at one of a plurality of different heights since the connectors 28a extend along the majority of the casing of said camera, providing connection at any position where the camera is positioned inside the connector) (Col. 25, ¶ 62 – col. 27, line 38).

Miyake 033 does not explicitly disclose that said camera receiving area comprises a through hole extending entirely through a housing of the camera electrical connector.

However, Miyake 669 discloses a portable telephone (Fig. 1) provided with a camera (Fig. 1: 1), said portable telephone comprising a telephone printed wiring board (mother board 2 as shown in fig. 1) having a transceiver attached to said printed wiring board (Miyake 669 inherently disclose a transceiver attached to the mobile telephone printed wiring board since a transceiver is necessitated in a mobile telephone printed

wiring board to transmit and receive data), wherein said telephone printed wiring board comprises camera electrical connector (formed as a hole in the substrate) having a camera receiving area (opening 201 as shown in fig. 2A) adapted to receive a camera therein and make electrical contact with conductors (Fig. 2A: 104), said receiving portion comprises a through hole extending entirely through a said camera electrical connector (See figs. 1 and 2A) (Col. 4, line 63 – col. 5, line 46).

Therefore, taking the combined teaching of Miyake 033 in view of Miyake 669 as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electrical connector in Miyake 033 by making a through hole extending entirely through a housing of the camera electrical connector. The motivation to do so would have been to reduce the size and thickness of the mobile telephone as suggested by Miyake 669 (Col. 2, lines 36-43).

Regarding claim 20, the combined teaching of Miyake 033 in view of Miyake 669 as discussed and analyzed in claim 19 teaches that the camera electrical connector comprises contacts (See Miyake 033 figs. 64 and 67) extending into the camera receiving area (See Miyake 033 figs. 64 and 67) from a first lateral side of the camera receiving area (See Miyake 033 figs. 64 and 67) but fails to teach that the contacts are spring contacts.

However, Official Notice is taken that the use of spring contacts (such as J-lead contacts) in semiconductors devices to connect said semiconductor device to a wiring board is notoriously well known in the art and one of ordinary skill in the art would find obvious to have the contact of the camera in Miyake 033 and Miyake 669 made as a

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spring with the motivation of maintaining the image pickup device in place while protecting the device from cracking when assembling said device to a substrate or a wiring board.

Regarding claim 21, the combined teaching of Miyake 033 and Miyake 669 as discussed and analyzed in claim 20 teaches that the spring contacts extend into the camera receiving area from a second opposite lateral side of the camera receiving area (See Miyake 033, figs. 64 and 67).

Regarding claim 22, the combined teaching of Miyake 033 and Miyake 669 as discussed and analyzed in claim 20 teaches that the camera electrical connector comprises a housing with a general ring shape (See Miyake 033, figs. 64 and 67) and wherein the camera receiving area is located inside the general ring shape (See Miyake 033, figs. 64 and 67).

Regarding claim 23, limitations can be found in claim 19.

Regarding claim 31, limitations can be found in claim 19.

Regarding claim 33, this is a method claim of the apparatus in claim 19.

Therefore, grounds for rejecting claim 19 apply here.

**Regarding claim 34**, limitations can be found in claim 20.

Regarding claim 35, limitations can be found in claim 21.

Regarding claim 36, limitations can be found in claim 20.

Regarding claim 37, Miyake 033 discloses an electronic device (Fig. 64) comprising: a device printed wiring board (Fig. 67: 30); and a camera (Fig. 64; 2) mounted on a connector (Fig. 67: 29) on the device printed wiring board and coupled to

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the device printed wiring board by a stepless movement variable height connection (Using connector 29 as shown in figs. 64 and 67), wherein the stepless movement variable height connection allows the camera to slide relative to the device printed wiring board along a first axis to allow positioning of the camera relative to the device printed wiring board at one of a plurality of different heights along the first axis, wherein the plurality of different heights extends along a majority of a height of the camera (Note that the structure of the camera in Miyake allows the camera to be slid into the connector at one of a plurality of different heights since the connectors 28a extend along the majority of the casing of said camera, providing connection at any position where the camera is positioned inside the connector) (Col. 25, ¶ 62 – col. 27, line 38).

Miyake does not explicitly disclose that the connector is a slot therethrough and that the camera extends through the slot.

However, Miyake 669 discloses a portable telephone (Fig. 1) provided with a camera (Fig. 1: 1), said portable telephone comprising a telephone printed wiring board (mother board 2 as shown in fig. 1) having a transceiver attached to said printed wiring board (Miyake inherently disclose a transceiver attached to the mobile telephone printed wiring board since a transceiver is necessitated in a mobile telephone printed wiring board to transmit and receive data), wherein said telephone printed wiring board comprises camera electrical connector (formed as a hole in the substrate) having a camera receiving area (opening 201 as shown in fig. 2A) adapted to receive a camera therein and make electrical contact with conductors (Fig. 2A: 104), said receiving

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portion comprises a through hole extending entirely through a said camera electrical connector (See figs. 1 and 2A) (Col. 4, line 63 – col. 5, line 46).

Therefore, taking the combined teaching of Miyake 033 in view of Miyake 669 as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electrical connector in Miyake 033 by making a through hole extending entirely through a housing of the camera electrical connector and have said camera extending through the slot. The motivation to do so would have been to reduce the size and thickness of the mobile telephone as suggested by Miyake 669 (Col. 2, lines 36-43).

Regarding claim 38, the combined teaching of Miyake 033 in view of Miyake 669 as discussed and analyzed in claim 19 teaches that the device printed wiring board comprises contact pads at the slot and the camera comprises contacts in the slot and slidable along the contact pads (Miyake 033, fig. 64: 29a) but fails to teach that the camera contacts are spring contacts.

However, Official Notice is taken that the use of spring contacts (such as J-lead contacts) in semiconductors devices to connect said semiconductor device to a wiring board is notoriously well known in the art and one of ordinary skill in the art would find obvious to have the contact of the camera in Miyake 033 and Miyake 669 made as a spring with the motivation of maintaining the image pickup device in place while protecting the device from cracking when assembling said device to a substrate or a wiring board.

8. Claims 9, 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake, US Patent 7,110,033 B2 in view of Harazono, US Patent 7,029,186 B2.

Regarding claim 9, Miyake discloses that the electrical conductors extend along an adjacent side of the housing (See fig. 64) but does not explicitly disclose that the connectors also extends along a rear end of the housing and that the camera comprises a camera printed wiring board connected to the rear end of the housing and coupled to the electrical connectors.

However, Harazono teaches a camera system (See fig. 1), the camera system comprising a housing (Fig. 1: 1), electrical connector along a rear end of the housing and on at least a first lateral side of the housing (See fig. 9: 105) to establish electrical connection with the image pick-up semiconductor (Fig. 1: 4), a camera printed wiring board (Fig. 8: 13) stationarily connected to the rear end of the housing and coupled to the housing electrical conductors (Fig. 7: 105 and fig. 9: 105); said housing including an image pick-up device (Fig. 7: 104) (Col. 1, line 29 – col. 2, line 5). Having an image processing stationary connected to the camera is advantageous because it would reduce the size and cost of assembling of the portable electronic device.

Therefore, taking the combined teaching of Miyake in view of Harazono as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Miyake by having a camera printed wiring board stationarily connected to the housing and coupled to the electrical conductors. The motivation to do so would have been to reduce the size and to enhance the

performance of the image capturing device as suggested by Harazono (Col. 1, lines 6-27).

Regarding claim 12, Miyake discloses a portable electronic device camera (Fig. 64) comprising: a housing (See fig. 64; 2); electrical conductors (Fig. 64: 28a) extending along a first lateral side of the housing; wherein the electrical conductors are adapted to be removably connected to contacts (Fig. 64: 29a) of an electrical connector (Fig. 64: 29) located along the first lateral side of the housing (See fig. 64) (Col. 25, ¶ 62 – col. 27, line 38).

Miyake does not explicitly disclose that said electrical conductors also extend along a rear end of the housing; and a camera printed wiring board stationarily connected to the rear end of the housing and coupled to the electrical conductors.

However, Harazono teaches a camera system (See fig. 1), the camera system comprising a housing (Fig. 1: 1), electrical connector along a rear end of the housing and on at least a first lateral side of the housing (See fig. 9: 105) to establish electrical connection with the image pick-up semiconductor (Fig. 1: 4), a camera printed wiring board (Fig. 8: 13) stationarily connected to the rear end of the housing and coupled to the housing electrical conductors (Fig. 7: 105 and fig. 9: 105); said housing including an image pick-up device (Fig. 7: 104) (Col. 1, line 29 – col. 2, line 5). Having an image processing stationary connected to the camera is advantageous because it would reduce the size and cost of assembling of the portable electronic device.

Therefore, taking the combined teaching of Miyake in view of Harazono as a whole, it would have been obvious to one of ordinary skill in the art at the time the

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invention was made to modify Miyake by having a camera printed wiring board stationarily connected to the housing and coupled to the electrical conductors. The motivation to do so would have been to reduce the size and to enhance the performance of the image capturing device as suggested by Harazono (Col. 1, lines 6-27).

Regarding claim 13, limitations can be found in claim 12.

Regarding claim 14, the combined teaching of Miyake in view of Harazono as discussed and analyzed in claim 12 teaches that the electrical conductors comprises metallized conductor paths along exterior sides of the housing (Miyake, fig. 64).

Regarding claim 15, limitations can be found in claim 12.

Regarding claim 16, the combined teaching of Miyake in view of Harazono as discussed and analyzed in claim 12 teaches that the electrical conductors along the first lateral side are adapted to slide along the contacts of the electrical connector in a first axis of insertion (optical axis) of the portable electronic device camera into the electrical connector to provide an adjustable height connection of the portable electronic device camera to the electrical connector (Note that the structure of the camera in Miyake allows the camera to be slid into the connector at one of a plurality of different heights since the connectors 28a extend along the majority of the casing of said camera, providing connection at any position where the camera is positioned inside the connector) (Col. 25, ¶ 62 – col. 27, line 38).

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Regarding claim 17, the combined teaching of Miyake in view of Harazono as discussed and analyzed in claim 12 teaches an image inlet aperture is located at a front end of the housing (Miyake, Fig. 64: 2a).

Regarding claim 18, limitations can be found in claim 12.

9. Claims 10, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake, US Patent 7,110,033 B2 in view of Nishio, US Patent 7,077,663 B2.

Regarding claim 10, Miyake discloses that the electrical connector comprises a housing having a general ring shape (See figs. 64, 65C and 67) with a center camera receiving slot (See figs. 64, 65C and 67) but does not explicitly disclose electrical spring contacts extending into the camera receiving slot from opposite sides of the general ring shape.

However, Nishio discloses an electronic device (Col. 4, lines 46-53) comprising: a device printed wiring board (Col. 4, line 66 – col. 5, line 10); an electrical connector (Figs. 2B: 25 and 3: 25) connected to the device printed wiring board; a camera (Figs. 1C: 21 and 3: 21) coupled to the device printed wiring board by the electrical connector at a stepless movement height connection (Col. 4, line 54 – col. 5, line 40), wherein the stepless movement height connection allows the camera to slide relative to the electrical connector along a first axis (optical axis) to allow positioning of the camera relative to the electrical connector at one of a plurality of different heights along the first axis (As shown in fig 3, the camera can be slid relative to the circuit board since the pins

2D and 3).

26 are formed as springs that would allow to move the camera and can also hold in place said camera without needing to have steps to hold the camera in place) (Col. 4, line 44 – col. 5, line 40); wherein the electrical connector comprises a housing having a general ring shape (See figs. 2A, 2D and 3) with a center camera receiving slot (See figs. 2D: 25 and 3: 25), and electrical spring contacts (Fig. 2D: 26 and 3: 26) extending into the camera receiving slot from opposite sides of the general ring shape (See figs.

Therefore, taking the combined teaching of Miyake in view of Nishio as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Miyake by having electrical spring contacts extending into the camera receiving slot from opposite sides of the general ring shape. The motivation to do so would have been to efficiently secure the connector as suggested by Nishio (Col. 4, line 66 – col. 5, line 67).

Regarding claim 26, limitations can be found in claim 10.

Regarding claim 27, limitations can be found in claim 10.

#### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hiltunen et al., US 2004/0212718 A1 teaches an electronic device having a camera coupled to a device's printed wiring board by the electrical connector at a stepless movement height connection (See figs. 3 and 4).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 9:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nelson D. Hernandez Examiner Art Unit 2622

NDHH September 17, 2007

PRIMARY EXAMINER